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REMARKS/ARGUMENTS

The above amendment and the following remarks are in reply to the non-final Office action of 11/15/2006. In light of this reply, reconsideration and further examination of this application are respectfully requested.

Thirteen claims were pending in this application. In the above amendment, 3 claims (1, 9 and 12) were amended, 1 claim (2) was cancelled and none was added. Accordingly, 12 claims (1 and 3-13) remain pending for reconsideration and further examination.

In section 3 of the Office action, the Examiner rejected claims 1-3, 5-6 and 9-10 under 35 USC 102(b) as being anticipated by Nitta et al.(US 6,801,178), stating, in pertinent part,

*"Nitta discloses ... wherein the apparatus further comprises a digital/analog converter converting the digital gray data (5 in fig. 1) from the signal controller (1 in fig. 1) into analog voltages (VG0-VG255 in fig. 6) and supplying the analog voltages (16 in fig. 1) to the data driver as gray voltages." (Emphasis added.)*

In light of the above amendments to independent claims 1 and 9 and the remarks that follow, this rejection is respectfully traversed.

The present invention comprises a signal controller generating digital gray data based on a distribution of grays of image data for one frame and a digital/analog converter converting the digital gray data into analog voltages and supplying the analog voltages to a data driver as gray voltages.

The Examiner contends that Nitta discloses "a digital/analog converter." However, a review of Nitta reveals that numeral 5 in Fig. 1 thereof designates "set data 306" or "display data 305" ('178, Fig. 19 and col. 10, lines 50-53). When the set data 306 are input to a register 13, the register 13 outputs a register output signal based on the set data 306. Thus, a select circuit 203 selects one of each of a plurality of groups VS0-VS31, VS32-VS63 ... VS224-VS255 of select reference voltages to transmit a gray scale voltage generating circuit 205 through a buffer amplifier 206 (*Id.*). Therefore, the magnitude of the gray scale voltages VG0-VG255 is varied based on the reference voltages V1B to V7B of the buffer amplifier 206. That is, contrary to the Examiner's assertion, the set data 306 is not digital gray data, but rather, control data 306 controlling an operation of the select circuit 203.

As a result of this difference, the present invention varies the digital gray data, which are transmitted to the digital/analog converter, based on the distribution of the grays of the image data for one frame, whereas, Nitta varies the control data 306 (not digital gray data) for control-

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ling the operation of the select circuit 203 based on a brightness distribution. Accordingly, Nitta does not teach or suggest the limitations, "a signal controller generating digital gray data based on a distribution of grays of image data for one frame, and a digital/analog converter converting the digital gray data into analog voltages and supplying the analog voltages to a data driver as gray voltage," of the present invention.

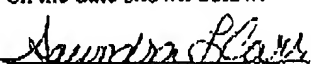
Accordingly, it is respectfully submitted that independent claims 1 and 9, as well as the claims respectively dependent from them, are patentably distinguishable over Nitta et al. ('178).

In section 5, the Examiner rejected claims 4 and 13 under 35 U.S.C. 103(a) as being unpatentable over Nitta et al (US 6,601,178) above in view of Kitahara et al (US 6,847,377). However, a review of the Kitahara '377 reference reveals that it does not supply any of the deficiencies in teaching of Nitta et al. '178 discussed above *vis-à-vis* independent claims 1 and 9, from which claims 4 and 13 depend, and accordingly, it is respectfully submitted that these claims are likewise patentably distinguishable over the combination of Nitta et al '178 and Kitahara et al '377.

In section 7, the Examiner objected to claims 7-8 and 11-12 as being dependent upon a rejected base claim, but indicated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

However, in light of the above reply, Applicant respectfully submits that all remaining claims (1 and 3-13) of this application are patentable over the art of record and therefore requests that a timely Notice of Allowance be issued in this case.

If there are any questions regarding this reply, the Examiner is invited to contact the undersigned at the number below.

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I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.	
 Saundra L. Carr	<u>Feb. 15, 2007</u> Date of Signature

Respectfully submitted,



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